Formula Sheet

Heat Formulas:

Q = mC∆T Q = mHf Q = mHv

Q = heat, unit: Joules (J)

m = mass, unit: grams (g)

C = specific heat capacity, unit: J/goC

(for water C = 4.18)

∆T = change in temperature

Hf = heat of fusion, unit: J/g

(for water = 334)

Hv = heat of vaporization, unit: J/g

(for water = 2260)

Temperature Conversions:

Kelvin = oC + 273 oC = K – 273

Charles Law:

Be careful with the units of temperature!

V1 V2

T1 T2

Boyles Law: Combined Gas Law:

P1V1 = P2V2 P1V1 = P2V2

T1 T2

**Be careful with the units of temperature!**